Chapter 7A: Update on CERP Implementation

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SUMMARY AND HIGHLIGHTS

The Comprehensive Everglades Restoration Plan (CERP) is the framework and guide for the restoration, protection, and preservation of the water resources of the central and southern Florida ecosystem. It also provides for other water-related needs of the region such as water supply and flood protection. The plan was authorized by the Water Resources Development Act of 2000 (WRDA 2000), which requires that it be integrated with existing federal and state activities in accordance with WRDA 1996.

The goals of CERP are to restore the quantity, quality, timing, and distribution of water. The CERP includes over 50 projects that involve either structural or operational changes to modify the C&SF Project to achieve these goals. Due to the scale and complexity of CERP, the effects of its implementation on ecosystem restoration will not be apparent for many years. Many projects must be implemented before the hydrologic improvements necessary for ecosystem restoration can be made. The timing and distribution of water by the Central and Southern Florida (C&SF) Project can only be altered after water storage capacity has been increased along with any necessary water quality improvements. As the components to improve the timing and distribution of water are completed, the ecosystem should begin recovering rapidly.

Section 373.470(7), Florida Statutes, requires the submission of a single CERP Annual Report from the South Florida Water Management District (SFWMD) and the Florida Department of Environmental Protection. This must report CERP financial information and the progress of implementation. For the past two years, this report has been produced separately. This year, it has been incorporated into the Everglades Consolidated Report. The financial information from the period of October 1, 2001 through September 30, 2002 will be reported, but it will not be available until the final publication of this report.

At this phase of CERP implementation, the SFWMD and the United States Army Corps of Engineers (USACE) are acquiring land, developing and administering programs, and conducting pilot projects and feasibility studies, and developing project management plans and implementation reports. Several Critical Projects begun prior to the authorization of the CERP have been incorporated into the plan and some are currently under construction.

From May 1, 2001 through April 30, 2002 (Water Year 2002), 18,767 acres of land were acquired that are suitable for use by CERP projects. Some of this land will be used for the

following projects: Biscayne Bay Coastal Wetlands, the C-111 Spreader Canal, Broward County Water Preserve Areas, Taylor Creek/Nubbins Slough Storage and Treatment Area, and Indian River Lagoon.

Seven major efforts currently comprise the program-level activities for CERP. These programs are Program Controls, Geodetic Vertical Control Surveys, RECOVER, Public Outreach, Environmental and Economic Equity, Data Management and Recreation. During the past two years, program management plans were developed over for all of the programs, with the exception of Recreation. This plan is currently being developed. Also, the Master Program Management Plan and the RECOVER Program Management Plan are currently being updated.

The SFWMD and the USACE have started detailed planning and design of CERP projects generally in accordance with the implementation schedule of the original plan. The implementation schedule is revised at least annually to incorporate changes based on new state and federal legislation and other factors. Also, changes are made to reduce technical uncertainties and clarify relationships between external milestones and specific CERP projects. The most recent schedule was published in July 2001 (USACE and SFWMD, 2001f) and will be revised following the promulgation of programmatic regulations required by WRDA 2000.

Several of these projects are pilot projects or feasibility studies. The purpose of the pilot projects is to test the use of several different technologies to accomplish the alterations necessary to restore the South Florida ecosystem. The feasibility studies will determine whether proposed projects can accomplish the restoration goals set for a region.

The SFWMD and the USACE have started detailed planning and design of 7 pilot projects, 3 feasibility studies, and 12 construction projects. In addition, they have continued implementing 3 feasibility studies and 7 critical projects that commenced prior to the authorization of CERP.

More information on CERP is available on www.evergladesplan.org. This web site provides the most up-to-date information available on all aspects of CERP implementation.

HISTORY

The Central and Southern Florida (C&SF) Project was authorized by Congress in 1948 to provide flood control, water supply, prevention of saltwater intrusion, and protection of fish and wildlife resources. The design of the project was based on forecasts that significantly underestimated the intensity of land uses and future population growth. The demands on the system's flood protection and water supply capabilities are now much larger than anticipated. In addition, the natural systems of South Florida have been degraded by the intensity of land use and water management practices. The degradation of the South Florida ecosystem must stop. It must be restored, preserved and protected. The C&SF Project must also continue to provide for other water-related needs of the region, including water supply and flood protection.

A process referred to as the Restudy began in 1994 to reexamine and determine the feasibility of modifying the C&SF Project to achieve these goals. During the Restudy, a multiagency, multidisciplinary team formulated and evaluated alternative comprehensive plans based on computer simulations, field observations, and professional judgement. In 1999, a comprehensive plan was laid out in the *Central and Southern Florida Project Comprehensive Review Study, Final Integrated Feasibility Report and Programmatic Environmental Impact Statement* (USACE and SFWMD, 1999). The plan was approved with the signing of WRDA 2000 in December 2000.

The Water Resources Development Act of 2000 (WRDA 2000) recognized the comprehensive plan, now referred to as the Comprehensive Everglades Restoration Plan (CERP), as the framework for modifications to the C&SF Project and requires that implementation be integrated with existing federal and state activities in accordance with WRDA 1996.

OVERVIEW OF CERP PROCESS

The Comprehensive Everglades Restoration Plan (CERP) is the framework and guide for the restoration, protection, and preservation of the water resources of the central and southern Florida ecosystem. It also provides for other water-related needs of the region such as water supply and flood protection.

The goals of CERP are to restore the quantity, quality, timing, and distribution of water. To restore the timing and distribution, the quantity of water available must first be increased. Also, to prevent further damage to and allow restoration of the system, the quality of the water must be improved where necessary prior to redistributing it.

The CERP includes over 50 projects that involve either structural or operational changes to modify the C&SF Project. Many of these projects are interrelated and will only perform optimally once the other related projects are brought on line. A full list and descriptions of these projects is provided in Appendix 7a-1.

Even prior to implementing projects that will store the water and improve its quality, numerous tasks must be accomplished. These include determining the feasibility of using new technologies, defining the optimum timing and distribution of water, developing supporting programs, acquiring the land necessary for the projects, and producing detailed project designs. In addition, a process will be developed to monitor the progress and success of the plan and modify the plan in instances where adjustments and improvements are needed.

The Restudy recommended the use of several different technologies to accomplish the alterations necessary to restore the South Florida ecosystem. The feasibility of using these technologies will be determined by conducting pilot projects. Some of the facilities proposed, such as Aquifer Storage and Recovery (ASR) and seepage control, have not been implemented on such a large scale.

The optimum timing and distribution of water within the natural ecosystem must be refined. By reviewing historical data, a picture of how the natural system behaved prior to human intervention has been developed, but in many areas, detailed information was lacking. In some cases, it will not be practicable to restore the system to its historical state. Also, existing animal and plant populations have adapted to some degree to the altered ecosystem.

New programs must be developed to support the restoration effort. Support will be needed, among other things, to manage the budget, manage data, conduct land surveys, collect supporting data, communicate with the public, ensure equity, preserve and enhance recreation, monitor the progress of the restoration effort, and revise the plan when necessary. Some of these functions may be conducted within existing programs, but the majority will be performed by programs developed specifically for CERP.

Due to the scale and complexity of CERP, the effects of its implementation on ecosystem restoration will not be apparent for many years. Many projects must be implemented before the

hydrologic improvements necessary for ecosystem restoration can be made. The timing and distribution of water by the C&SF Project can only be altered after water storage capacity has been increased along with any necessary water quality improvements. As the components to improve the timing and distribution of water are completed, the ecosystem should begin recovering rapidly. Figure 7a-1 presents a conceptual time line for ecosystem recovery as CERP implementation proceeds.

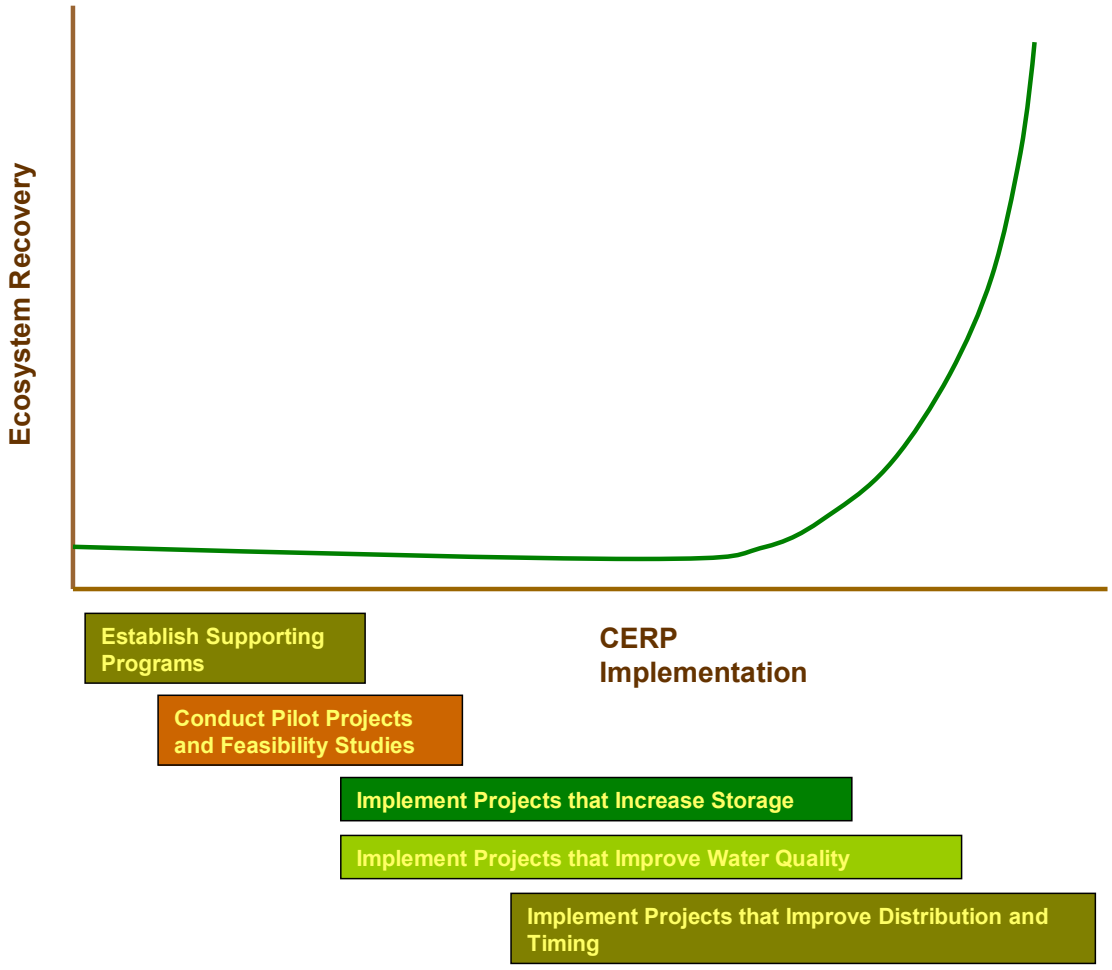

Figure 7a-1. Conceptual Time Line for CERP Implementation and Ecosystem Recovery.

DESIGN AGREEMENT

The Design Agreement executed between the South Florida Water Management District (SFWMD) and the United States Army Corps of Engineers (USACE) in May 2000 covers activities related to planning, engineering and design of CERP implementation (USACE and SFWMD, 2000a). The agreement established 50/50 cost-sharing between the SFWMD and the USACE for all projects for which the SFWMD is the local sponsor. The Design Agreement requirements include the development of a Master Program Management Plan, the establishment of a Design Coordination Team, and the development of Project Management Plans (PMPs) for each of the projects covered by the agreement.

Master Program Management Plan

According to the Design Agreement, the Master Program Management Plan must include descriptions and cost estimates for design work, performance schedules with deadlines, a schedule for planning and implementing Restoration Coordination and Verification (RECOVER) activities, and a budget.

The initial *CERP Master Program Management Plan*, completed in August 2000 (USACE and SFWMD, 2000b), specified completion of program management plans for several program-level activities. These efforts involve or affect a number of projects or the entire restoration program. The program-level activities include RECOVER, Public Outreach, Program Controls, and other cross-project processes. All program-level activities have a program management plan or have one under development. The status of these activities is discussed below.

Project-Level Activities

Project-level activities include planning, engineering, design, and project management efforts that are specific to individual projects. Each project has a Project Delivery Team (PDT) that is responsible for these activities.

The first step a PDT takes is the development of a Project Management Plan (PMP). A PMP is prepared for each project prior to initiating design work. It provides a detailed description of the scope, activities, tasks, schedule, cost estimates, and agency responsibilities for a program or project.

Once the PMP has been completed and approved, a Project Implementation Report (PIR) is then developed. The purpose of the PIR is to recommend the most feasible and cost-effective means of implementing the project. During this process, both structural and nonstructural alternative plans will be evaluated for economic, environmental, and engineering effectiveness. Criteria for site suitability will be established and a siting analysis will be conducted.

Finally, a Design Documentation Report (DDR) must be produced. A DDR provides the technical basis for a project's plans and specifications. It serves as a summary of all engineering and design decisions made by the PDTs during project development and implementation. The DDR covers the preconstruction engineering through to project completion. The DDR is not complete until both the plans and specifications and construction phases are completed.

Design Coordination Team

The Design Coordination Team generally oversees issues related to design to, among other things, ensure that the USACE and the SFWMD agree on the design work to be performed and the scheduling and costs for this work. The team is responsible for reviewing design plans, schedules and budgets; work products such as PMPs, PIRs, DDRs; construction plans and specifications; proposed updates of the Master Program Management Plan; land acquisition and relocation requirements; contract scopes of work, modifications, and costs; cost projections; anticipated requirements for the operation and maintenance of projects; and RECOVER activities.

CERP 470 REPORT

Section 373.470(7), Florida Statutes (F.S.), requires the submission of a single CERP Annual Report from the SFWMD and the Florida Department of Environmental Protection (FDEP) to the Governor, the President of the Senate, and the Speaker of the House of Representatives by January 31. Its purpose is to "…provide enhanced oversight of and accountability for the financial commitments established under this section (Everglades Restoration) and the progress made in the implementation of the comprehensive plan." The statute also requires that this report be made available to the public. For the past two years, the SFWMD and FDEP have fulfilled this mandate by producing stand-alone reports (SFWMD and FDEP, 2000, 2002), referred to as the CERP Annual 470 Report. This year, the CERP Annual 470 Report has been incorporated into the Everglades Consolidated Report.

This current annual report will contain financial information from the period of October 1, 2001 through September 30, 2002. The financial information will not be available until the final publication of this report.

The report is divided into three parts based upon the portion of the statute that each is fulfilling. These parts are summarized below. In Part (a), the SFWMD and FDEP jointly identify funding sources and amounts, itemize fiscal year 2002 expenditures and fund balances, and provide a schedule of anticipated expenditures for fiscal year 2003. In Part (b), FDEP provides a detailed report on all funds appropriated and expended by the state on current land acquisition projects related to CERP. Final credit toward the nonfederal share of funding will be determined in each project cooperative agreement. In Part (c), the SFWMD and FDEP are required to provide a detailed report on progress made in the implementation of CERP, including the status of all projects initiated after the effective date of the Everglades Restoration Investment Act (Section 373.470, F.S.).

PART (A) FUNDS – SFWMD AND FDEP

BACKGROUND

Pursuant to Section 373.470(7)(a), F.S., Part (a) contains information on revenues (Table 7a-1), expenditures (Table 7a-2), unencumbered balance of funds remaining in trust funds or other accounts (Table 7a-3), and anticipated expenditures for the next fiscal year (Table 7a-4) as they relate to implementation of CERP. Only revenues, expenditures, and unencumbered balances dedicated to CERP are included within this report. The purposes for which funds were expended are provided in Appendix 7-1. The financial information contained in this annual report is from

the period of October 1, 2001 through September 30, 2002. This period of time is the SFWMD's 2002 fiscal year. As the fiscal year has not yet ended, this information is not yet available. The financial information will be provided by the SFWMD for the final publication of this report. This information will be unaudited. The audit should be completed during the second quarter of fiscal year 2003. Any changes will be reflected in the Comprehensive Annual Financial Report. No federal revenues or expenditures are reflected in these schedules.

The SFWMD will be funding its share of the CERP with revenues from several sources. Ad valorem taxes and state appropriations comprise the largest portion of these revenues. Other sources include, but are not limited to, investment earnings on available cash balances, mitigation revenues, Save Our River funds, Preservation 2000 Trust funds, and grants.

BASIS OF PRESENTATION

Both the SFWMD's and FDEP's accounting policies conform to generally accepted accounting principles for state and local governments and are structured in accordance with the requirements of the Government Accounting Standards Board. These principles require the use of fund accounting. A fund is a separate fiscal and accounting entity having a self-balancing set of accounts. Fund accounting is designed to segregate transactions related to certain functions or activities to ensure that resources are applied to finance the activities and objectives for which the resources are received and to demonstrate compliance with legal and contractual obligations.

Table 7a-1. CERP Revenues for October 1, 2001 through September 30, 2002

Source	SFWMD[1]	FDEP	Other Local Sponsor	Total
Save Our Everglades Trust Fund				
General Revenue	-	-	-	-
Preservation 2000 Trust Fund	-		-	
Florida Forever Trust Fund	-		-	
Inves			-	
Tota			-	
Ad Val			-	
Investm			-	
State A			-	
Save O			-	
Conser			-	
Preser			-	
Grants			-	
Mitigation Revenue			-	
Palm Beach County Water Utility Revenues				
TOTAL REVENUES				

Information not available until the end of the fiscal year (September 30, 2002)

[1] This information is being presented prior to the completion of the SFWMD annual audit. The results of the audit adjustments, if any, will be reflected in subsequent annual reports.

[2] This amount represents earnings on ad valorem revenue that was designated for the CERP.

[3] This amount represents revenues that support encumbrances for land acquisitions as of September 30, 2002. This amount is included in total encumbrances reported in Table 7a-3.

Table 7a-2. CERP Expenditures for October 1, 2001 through September 30, 2002[1,2]

Projects	SFWMD[3]	FDEP	Total
Local Sponsor -- South Florida Water Management District			
Pilot Projects			
Lake Okeechobee Aquifer Storage and Recovery (ASR) Pilot Project			
Caloosahatchee River (C-43) Basin ASR Pilot Project			
Hillsboro ASR Pilot Project			
Lake Belt In-Ground Reservoir Technology Pilot Project			
L-31N Seepage Management Pilot Project			
Wastewater Reuse Technology Pilot Project			
Kissimmee River and Lake Okeechobee Region			
Lake Okeechobee Watershed			
Lake Istokpoga Regulation Schedule			
Lake Okeechobee ASR			
Caloosahatchee River Region			
C-43 Basin Storage Reservoir – Part 1			
C-43 Basin ASR – Part 2			
Caloosahatchee Backpumping with Stormwater Treatment			
Upper East Coast Region			
Indian River Lagoon			
Everglades Agricultural Area			
Everglades Agricultural Area Storage Reservoirs - Part 1			
Everglades Agricultural Area Storage Reservoirs - Part 2			
Big Cypress Region			
Big Cypress/L-28 Interceptor Modifications			
Water Conservation Areas and Everglades Region			
Flow to Northwest and Central WCA 3A			
WCA 3 Decompartmentalization and Sheet Flow Enhancement - Part 1			
WCA 3 Decompartmentalization and Sheet Flow Enhancement - Part 2			
Loxahatchee National Wildlife Refuge Internal Canal Structures			
Modify Holey Land Wildlife Management Area Operation Plan			
Modify Rotenberger Wildlife Management Area Operation Plan			
Lower East Coast Region			
North Palm Beach County - Part 1			
North Palm Beach County - Part 2			
ACME Basin B Discharge			
Strazzula Wetlands			
Site 1 Impoundment			
Broward County Water Preserve Areas			
Dade-Broward Levee and Canal			
Bird Drive Recharge Area			
Palm Beach County Agriculture Reserve Reservoir			
Palm Beach County Agriculture Reserve ASR			
Hillsboro ASR – Part 2			
Diverting WCA Flows to Central Lake Belt Storage Area to Downstream Natural Areas			

Information not available until the end of the fiscal year (September 30, 2002)

[1] Expenditures include indirect costs that are charged to the program by applying a federally-approved rate to direct salaries. For fiscal year 2002, the rate was ? percent.

[2] Federal expenditures are not listed on this table.

[3] This information is being presented prior to the completion of the SFWMD annual audit. The results of the audit adjustments, if any, will be reflected in subsequent annual reports.

Projects	SFWMD[3]	FDEP	Total
Broward County Secondary Canal System			
North Lake Belt Storage Area			
Central Lake Belt Storage Area			
Everglades National Park Seepage Management			
Biscayne Bay Coastal Wetlands			
C-111N Spreader Canal			
Southwestern Florida Region			
Southern Golden Gate Estates Hydrologic Restoration			
Florida Bay and Florida Keys Region			
Florida Keys Tidal Restoration			
Critical Restoration Projects[1]			
Ten Mile Creek Critical Project			
Lake Trafford Restoration			
Lake Okeechobee Water Retention/Phosphorus Removal Critical Proje			
Critical Restoration Program Controls			
Reconnaissance, Feasibility, and Planning Studies			
Southwest Florida Feasibility Study			
Florida Bay and Florida Keys Feasibility Study			
Indian River Lagoon Feasibility Study			
Water Preserve Areas Feasibility Study			
Monitoring and Evaluation			
RECOVER			
Land Aquisition and Project Support			
CERP Real Estate Acquisition and Support			
CERP Project Support			
Program Management & Support			
CERP Program Management			
CERP Geodetic Vertical Control Surveys			
CERP Program Controls			
CERP Public Involvement and Outreach			
CERP Socioeconomic and Environmental Justice			
CERP Data Management			
CERP Reserves			
Local Sponsors Other than South Florida Water Management District[2]			
Comprehensive Integrated Water Quality Feasibility Study (FDEP)			
Seminole Tribe Big Cypress Reservation Water Conservation Plan (Seminole Tribe)			
Henderson Creek/Belle Meade Restoration (FDEP)			
Lake Park Restoration (Lee County)			
Melaleuca Eradication and Other Exotic Plants (United States Department of Agriculture)			
Winsburg Farms Wetlands Restoration (Palm Beach County)			
Miccosukee Water Management Plan (Missosukee Tribe)			
Restoration of Pineland and Hardwood Hammocks in C-111 Basin (Miami-Dade County)			
West Miami-Dade County Reuse (Miami-Dade County)			
South Miami-Dade County Reuse (Miami-Dade County)			
TOTALS			

Information not available until the end of the fiscal year (September 30, 2002)

[1] Expenditures incurred for the Southern Corkscrew Regional Ecosystem Watershed Project Addition (Critical Restoration Project) are not reflected here. The Water Resources Development Act of 2000 excluded this project from the CERP plan.

[2] The expenditures for local sponsors other than the SFWMD are presented in the "Total" column only. An NA indicates that the information is not available.

Table 7a-3. CERP Unencumbered Balance for October 1, 2001 through September 30, 2002

	SFWMD[1]	FDEP	Other Local Sponsors	TOTAL
Fund Balance as of September 30, 2001				
Add: Revenue				
Less: Expendi				
Expendi	[2]	-	-	
Total Funds Ava			-	
Less: Encumb			-	
Unencumbered				

Information not available until the end of the fiscal year (September 30, 2002)

Table 7a-4. Comprehensive Plan Anticipated Expenditures for the Next Fiscal Year: October 1, 2002 to September 30, 2003.[45]

Projects	Total Anticipated Expenses
Local Sponsor -- South Florida Water Management District	
Pilot Projects	
Lake Okeechobee ASR Pilot Project	
Caloosahatchee River (C-43) Basin ASR Pilot Project	
Hillsboro ASR Pilot Project	
Lake Belt In-Ground Reservoir Technology Pilot Project	
L-31N Seepage Management Pilot Project	
Wastewater Reuse Technology Pilot Project	
Kissimmee River and Lake Okeechobee Region	
Lake Okeechobee Watershed	
Lake Istokpoga Regulation Schedule	
Lake Okeechobee ASR	
Caloosahatchee River Region	
C-43 Basin Storage Reservoir – Part 1	
C-43 Basin ASR – Part 2	
Caloosahatchee Backpumping with Stormwater Treatment	
Upper East Coast Region	
Indian River Lagoon	
Everglades Agricultural Area	
Everglades Agricultural Area Storage Reservoirs – Part 1	
Everglades Agricultural Area Storage Reservoirs - Part 2	

Information not available until the end of the fiscal year (September 30, 2002)

[1] This information is being presented prior to the completion of the SFWMD annual audit. The results of the audit adjustments, if any, will be reflected in subsequent annual reports.

[2] Deducted from fund balance are expenditures associated with non-CERP Critical Restoration Projects that are also supported by dedicated ad valorem funds.

[3] Under the encumbrance method of accounting, commitments for the expenditure of resources are recorded in order to reserve that portion of the applicable budgetary appropriation. All unencumbered appropriations lapse at year-end. Encumbrances representing uncompleted contracts and purchase orders are recorded as a reservation of fund balance at year-end and reappropriated in the ensuing year's budget.

[4] Management plans for projects and program-level activities may require adjustments in these estimates.

[5] No anticipated federal expenditures are listed in this table.

Projects	Total Anticipated Expenses
Big Cypress Region	
Big Cypress/L-28 Interceptor Modifications	
Water Conservation Areas and Everglades Region	
Flow to Northwest and Central WCA 3A	
WCA 3 Decompartmentalization and Sheet Flow Enhancement - Part 1	
WCA 3 Decompartmentalization and Sheet Flow Enhancement - Part 2	
Loxahatchee National Wildlife Refuge Internal Canal Structures	
Modify Holey Land Wildlife Management Area Operation Plan	
Modify Rotenberger Wildlife Management Area Operation Plan	
Lower East Coast Region	
North Palm Beach County - Part 1	
North Palm Beach County - Part 2	
ACME Basin B Discharge	
Strazzula Wetlands	
Site 1 Impoundment	
Broward County WPA	
Dade-Broward Levee and Canal	
Bird Drive Recharge Area	
Palm Beach County Agriculture Reserve Reservoir	
Palm Beach County Agriculture Reserve ASR	
Hillsboro ASR – Part 2	
Diverting WCA Flows to Central Lake Belt Storage Area to Downstream Natural Areas	
Broward County Secondary Canal System	
North Lake Belt Storage Area	
Central Lake Belt Storage Area	
Everglades National Park Seepage Management	
Biscayne Bay Coastal Wetlands	
C-111 Spreader Canal	
Southwestern Florida Region	
Southern Golden Gate Estates Hydrologic Restoration	
Florida Bay and Florida Keys Region	
Florida Keys Tidal Restoration	
Critical Restorations[1]	
Ten Mile Creek Critical Project	
Lake Trafford Restoration	
Lake Okeechobee Water Retention/Phosphorus Removal Critical Project	
Critical Restoration Program Controls	
Reconnaissance, Feasibility, and Planning Studies	
Southwest Florida Feasibility Study	
Florida Bay and Florida Keys Feasibility Study	
Indian River Lagoon Feasibility Study	
Water Preserve Areas Feasibility Study	
Monitoring and Evaluation	
RECOVER	

Information not available until the end of the fiscal year (September 30, 2002)

[1] Anticipated expenditures for the Southern Corkscrew Regional Ecosystem Watershed Project Addition (Critical Restoration Project) are not reflected here. The WRDA 2000 excluded this project from the CERP.

Projects	Total Anticipated Expenses
Land Aquisition and Project Support	
CERP Real Estate Acquisition and Support[1]	
CERP Project Support[2]	
Program Management and Support	
CERP Program Management[3]	
CERP Geodetic Vertical Control Surveys	
CERP Program Controls	
CERP Public Involvement and Outreach	
CERP Socioeconomic and Environmental Justice	
CERP Data Management	
CERP Reserves[4]	
Local Sponsors Other than South Florida Water Management District[5]	
Comprehensive Integrated Water Quality Feasibility Study (FDEP)	
Seminole Tribe Big Cypress Reservation Water Conservation Plan (Seminole Tribe)	
Henderson Creek/Belle Meade Restoration (FDEP)	
Lake Park Restoration (Lee County)	
Melaleuca Eradication and Other Exotic Plants (United States Department of Agriculture)	
Winsburg Farms Wetlands Reuse (Palm Beach County)	
Miccosukee Water Management Plan (Miccosukee Tribe)	
Restoration of Pineland and Hardwood Hammocks in C-111 Basin (Miami-Dade County)	
West Miami-Dade County Reuse (Miaimi-Dade County)	
South Miami-Dade County Reuse (Miami-Dade County)	
TOTALS	

Information not available until the end of the fiscal year (September 30, 2002)

[1] The Real Estate Acquisition and Support budget includes projected land acquisition costs for the entire program. As costs are incurred, they will be charged to individual projects.

[2] The CERP Project Support budget includes an estimate of project-level support activities. As these costs are incurred, they will be charged to individual projects.

[3] The CERP Program Management budget includes ? million in estimated indirect costs. Indirect costs are charged to the program by applying a federally-approved rate to direct salaries (the applicable rate for fiscal year 2002 was ? percent).

[4] CERP Reserves represents funds set aside for contracts to support project-level activities for which project management plans had not been executed at the time of budget approval. As project management plans are executed and contracts are awarded, budget authority will be transferred, and subsequent charges will be made to individual projects. It is anticipated that this entire amount will be spent in fiscal year 2002.

[5] The expenditures for local sponsors other than the SFWMD are presented in the "Total" column only. An NA indicates that the information is not available.

PART (B): FUNDS - FDEP

BACKGROUND

Pursuant to Section 373.470(7)(b), F.S., Part (b) contains a detailed report of all funds expended by the state toward land acquisition for CERP in fiscal year 2002 (Table 7-2-5). Appendix 7-1 includes a description of the purposes for which funds were expended. The unencumbered fiscal year-end balance that remains in each identified trust fund is also reported. Only revenues, expenditures, and unencumbered balances dedicated to CERP are included within this report.

Each component identified in CERP will be described in detail in a project implementation report, and a project cooperation agreement will be subsequently executed for that component or group of components (also referred to as a project). The amount of expenditures to be credited toward the state's share of funding for implementation of CERP will be defined in the design and project cooperation agreements.

BASIS OF PRESENTATION

The FDEP's accounting policies conform to generally accepted accounting principles for state and local governmental units and are structured in accordance with the requirements of the Governmental Accounting Standards Board. These principles require the use of fund accounting. A fund is a separate fiscal and accounting entity having a self-balancing set of accounts. Fund accounting is designed to segregate transactions related to certain functions or activities to ensure that resources are applied to finance the activities and objectives for which the resources are received and to demonstrate compliance with legal and contractual obligations.

The information in these special purpose financial presentations relates to the General Fund and to special revenue funds classified as a governmental fund type. Special revenue funds are used to account for specific revenue sources, which are legally restricted to expenditure for specified purposes.

Table 7a-5. Revenues, Expenditures, and Encumbrances by the State toward Land Acquisition for All CERP Projects/Separable Elements for October 1, 2001 to September 30, 2002

	Save Our Everglades Trust Fund	Conservation & Recreation Lands Trust Fund	Preservation 2000 Trust Fund	Totals
REVENUES				
by source of funds				
General Revenue				
Preservation 2000 Trust Fund				
Florida Forever Trust Fund				
Conservation & Recreation Lands Trust Fund				
Interest Earnings				
TOTAL REVENUES				
EXPENDITURES				
by land acquisition project				
TOTAL EXPENDITURES				
ENCUMBRANCES				
by land acquisition project				
TOTAL ENCUMBRANCES				
Excess of Revenues Over Expenditures and Encumbrances				
Unencumbered Balance as of September 30, 2002				

Information not available until the end of the fiscal year (September 30, 2002)

PART (C): IMPLEMENTATION STATUS

One portion of the statute, Section 373.470(7)(c), F.S., or Part (c), requires that the status of CERP implementation be reported annually along with the financial information. Currently, the USACE and the SFWMD are acquiring land, developing and administering programs, preparing PMPs and PIRs, and conducting research relating to CERP.

STATUS OF LAND ACQUISITION

From May 1, 2001 through April 30, 2002 (Water Year 2002), 18,767 acres of land were acquired that are suitable for use by CERP projects. Some of this land will be used for the projects listed below. A more detailed description of land acquisition can be found in Chapter 8c. The general locations of the projects are presented in Figure 7a-2.

Biscayne Bay Coastal Wetlands. The Biscayne Bay Coastal Wetlands project will rehydrate wetlands and reduce point source discharges to Biscayne Bay.

C-111 Spreader Canal. The C-111 Spreader Canal will rehydrate the Model Lands, establish sheet flow and hydropatterns that will sustain ecosystems in the Southern Glades and Model Lands, provide more natural sheet flow to Florida Bay by eliminating point sources of freshwater discharges through C-111 to the estuarine systems of Manatee Bay and Barnes Sound, and maintain some level of flood protection for agricultural and urban areas in the project area.

Broward County Water Preserve Areas. The Broward County Water Preserve Areas (WPAs) project is comprised of several parts including the Water Conservation Area (WCA) 3A and 3B Levee Seepage Management Project and the C-9 and C-11 Impoundments. The WCA 3A and 3B Levee Seepage Management Project will reduce seepage and improve hydropatterns in WCA-3 and provide water supply deliveries to Miami-Dade County. The C-9 and C-11 Impoundments will treat water in the C-9 and C-11 basins.

Taylor Creek/Nubbins Slough Storage and Treatment Areas. This project is part of the Lake Okeechobee Watershed Project. The purpose of the Taylor Creek/Nubbins Slough Storage and Treatment Areas (STAs) is to attenuate flows to Lake Okeechobee and reduce the amount of nutrients flowing to the lake. It is designed to capture, store, and treat basin runoff during periods when levels in Lake Okeechobee are high or increasing and release the water back to the lake when lake levels decline to ecologically acceptable levels.

Indian River Lagoon. The Indian River Lagoon Project includes the C-44 Basin Storage Reservoir, the C-23 and C-24 Basins Storage Reservoirs, and the C-25 and the North and South Fork Storage Reservoirs. These are all included in the ongoing Indian River Lagoon Feasibility Study. The C-44 Basin Storage Reservoir will capture local runoff from the C-44 Basin, then return the stored water to the C-44 when there is a water supply demand. The remaining reservoirs will capture local runoff for flood flow attenuation to the St. Lucie River Estuary. The reservoirs will be designed for flood flow attenuation to the estuary; water supply benefits including environmental water supply deliveries to the estuary; and water quality benefits to control salinity and reduce loading of nutrients, pesticides, and other pollutants contained in runoff presently discharged to the estuary.

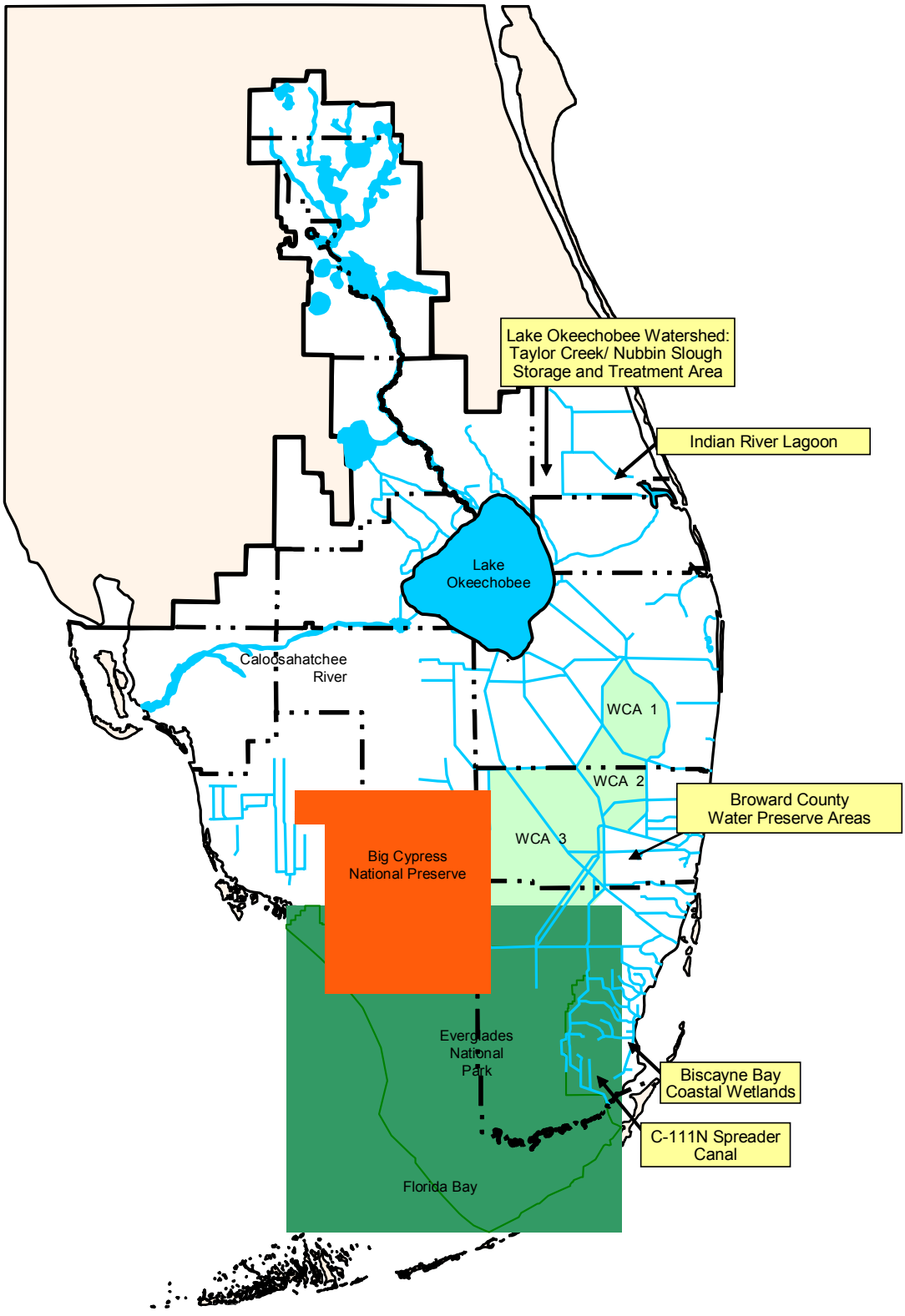

Figure 7a-2. General location of the CERP projects for which land was acquired during Water Year 2002

STATUS OF PROGRAM-LEVEL ACTIVITIES

Seven major efforts currently comprise the program-level activities for CERP: Program Controls, Geodetic Vertical Control Surveys, RECOVER, Public Outreach, Environmental and Economic Equity, Data Management and Recreation. The initial *Master Program Management Plan* (USACE and SFWMD, 2000b) specified completion of program management plans for Program Controls, Public Outreach, Environmental and Economic Equity, Geodetic Vertical Control Surveys, and RECOVER. Initial program management plans have been completed for all of these program-level activities and for Data Management (Table 7a-6). Also, a program management plan is currently being developed for Recreation. The Master Program Management Plan and the program management plan for RECOVER are currently being updated. The following paragraphs describe the program-level activities in more detail and provide an overview of their respective status.

Table 7a-6. Final approval of program management plans for program-level activities

Program-Level Activity	Initial Program Management Plan Completed	Expected Completion Date of Initial or Updated Plan
Master Program Management Plan	August 2000	February 2003
Program Controls	December 2000	
Geodetic Vertical Control Surveys	February 2001	
RECOVER	May 2001	October 2002
Public Outreach	August 2001	
Environmental and Economic Equity	August 2001	
Data Management	February 2002	
Master Recreation Plan		January 2003

Program Controls. The *Program Controls Management Plan* (USACE and SFWMD, 2001a) directs the implementation of a Program Controls function that will be able to confirm that CERP implementation is being managed in a manner consistent with what has been agreed upon by the SFWMD and the USACE. The initial management plan was approved in December 2000. This management plan identifies the joint implementation of critical program control functions, including program schedule management, financial management, records management, project performance measurement and reporting, and web site management. In November 2001, an Enterprise Project Management System was rolled out to manage the CERP implementation schedule. In June 2002, the SFWMD and the USACE began using the Documentum database to manage document production and tracking. The Master Implementation Schedule is being updated. Also, a Program Controls Implementation Plan and a CERP Guidance Memorandum on project cost estimates are being developed.

Geodetic Vertical Control Surveys. The Geodetic Vertical Control Surveys program-level activity consists of surveying a thousand linear miles of First Order Class II level lines, setting or recovering approximately a thousand monuments, route reconnaissance, web mapping, global position satellite positioning on red marks, data processing, and publishing the results on the National Spatial Reference System. The program management plan was approved in February 2001 (USACE and SFWMD, 2001b). Fieldwork began on May 9, 2001. The program is expected to be completed in March 2003.

RECOVER. The program management plan for RECOVER was completed in May 2001 (USACE and SFWMD, 2001c) and will be updated by October 2002. An annual report card aimed at providing information to the informed public and state and federal legislatures has been developed and is scheduled to be issued in November 2002. A draft of the report was provided in Appendix 7b-2. RECOVER is also managing the approximately $10 million per year authorized in WRDA 2000 for monitoring and assessment. A newly revised draft of the *Systemwide Monitoring and Assessment Plan* was completed in September 2002. Habitat suitability indices, which are used to define the quality of the habitat for various fish and other wildlife species, are being developed and should be published early in 2003.

Public Outreach. Public Outreach is a process by which interested and affected individuals, organizations and governmental entities are informed of a project and its goals, and have the opportunity to participate in the decision making process. Public outreach supports the exchange of ideas and information among interested individuals and groups that is critical to resolving the challenges that will arise during the implementation of the CERP. The *Public Outreach Program Management Plan* (USACE and SFWMD, 2001d) was completed in August 2001.

Environmental and Economic Equity. The Environmental and Economic Equity activity covers economic equity, environmental justice, socioeconomic baseline data, project support and guidance, research, and evaluation and assessment on socioeconomic parameters of program implementation. The *Environmental and Economic Equity Program Management Plan* (USACE and SFWMD, 2001e) was completed during September 2001. Since then, several projects have been implemented. These include a preliminary occupation analysis, a small business technical assistance program, collection of census data and creation of maps, environmental justice training development and delivery, a project guidance document, a FAMU contract, and the Glades Area Revitalization Project.

Data Management. The program management plan for data management will address the data needs of CERP implementation. A joint SFWMD-USACE team is currently identifying data requirements, developing the information technology infrastructure to support the requirements, and establishing data standards, guidelines, and protocols, as well as standard operating procedures to assure effective data integration. The program management plan (USACE and SFWMD, 2002a) was completed in February 2002. Currently, implementation plans are being developed for a data clearinghouse and various other software and data needs.

Master Recreation Plan. The impacts of CERP implementation on existing recreational use within the South Florida ecosystem will be identified, evaluated, and addressed in a CERP Master Recreation Plan. Potential new recreation, public use, and public educational opportunities will also be identified and evaluated. Promising opportunities may be recommended for further evaluation during the development of PIRs for specific CERP projects, for implementation through other cost-share arrangements between federal, state, local or nonprofit entities, or stand-alone congressional authorization. Development of the program management plan was initiated in August 2002 and is expected to be completed during January 2003.

STATUS OF PROJECT-LEVEL ACTIVITIES

The SFWMD and the USACE have started detailed planning and design of CERP projects generally in accordance with the implementation schedule of the original plan. The implementation schedule is revised at least annually to incorporate changes based on new state and federal legislation and other factors. Also, changes are made to reduce technical uncertainties and clarify relationships between external milestones and specific CERP projects. The most

recent schedule was published in July 2001 (USACE and SFWMD, 2001f) and will be revised following the promulgation of programmatic regulations required by WRDA 2000. The current list of all CERP projects is provided in Appendix 7a-1, along with a crosswalk to projects in the original CERP.

This section of the report highlights the individual projects and the PMPs and PIRs that have been initiated or completed. For purposes of this section, the projects have been grouped into four classifications: pilot projects, feasibility studies, critical projects and other CERP projects.

The SFWMD and the USACE have started detailed planning and design of 7 pilot projects, 3 feasibility studies, and 12 construction projects. In addition, they have continued implementing 3 feasibility studies and 7 critical projects that commenced prior to the authorization of CERP.

Pilot Projects

Seven pilot projects will be conducted to assist in the implementation of CERP (Table 7a-7 and Figure 7a-3). Four of these pilot projects are designed to test the construction and operation of Aquifer Storage and Recovery (ASR) systems. The remaining three are designed to test other proposed technologies. The PMPs have been completed for most of the projects. The project design teams (PDTs) are now working on pilot Design Documentation Reports (DDRs) and PIRs.

Table 7a-7. Final approval of PMPs and DDRs for pilot projects

Pilot Project	PMP Completed	Expected PMP Completion	Expected DDR Completion
Lake Okeechobee ASR Pilot	March 2001		July 2004
Caloosahatchee River (C-43) Basin ASR Pilot	November 2001		December 2004
Hillsboro ASR Pilot	March 2001		
ASR Regional Study		October 2002	
Lake Belt In-Ground Reservoir Technology Pilot	March 2002		January 2006
L-31N Seepage Management Pilot	April 2002		December 2005
Wastewater Reuse Technology Pilot Part 1	January 2002		
Wastewater Reuse Technology Pilot Part 2		February 2003	

Lake Okeechobee ASR Pilot Project. The Lake Okeechobee ASR Pilot Project will evaluate the technical and regulatory uncertainties associated with using ASR technology near Lake Okeechobee. The project includes data collection, plan formulation, permitting, design, construction, testing, operation, and reporting for five ASR systems that will store available water for subsequent recovery during dry periods. These five systems will be located at three geographically dispersed areas around Lake Okeechobee, with one of these sites being a three-well cluster to evaluate how multiple ASR systems interact with one another. In March 2001, the PMP was approved (SFWMD and USACE, 2001g) and a DDR was initiated. The DDR is expected to be completed in July 2004.

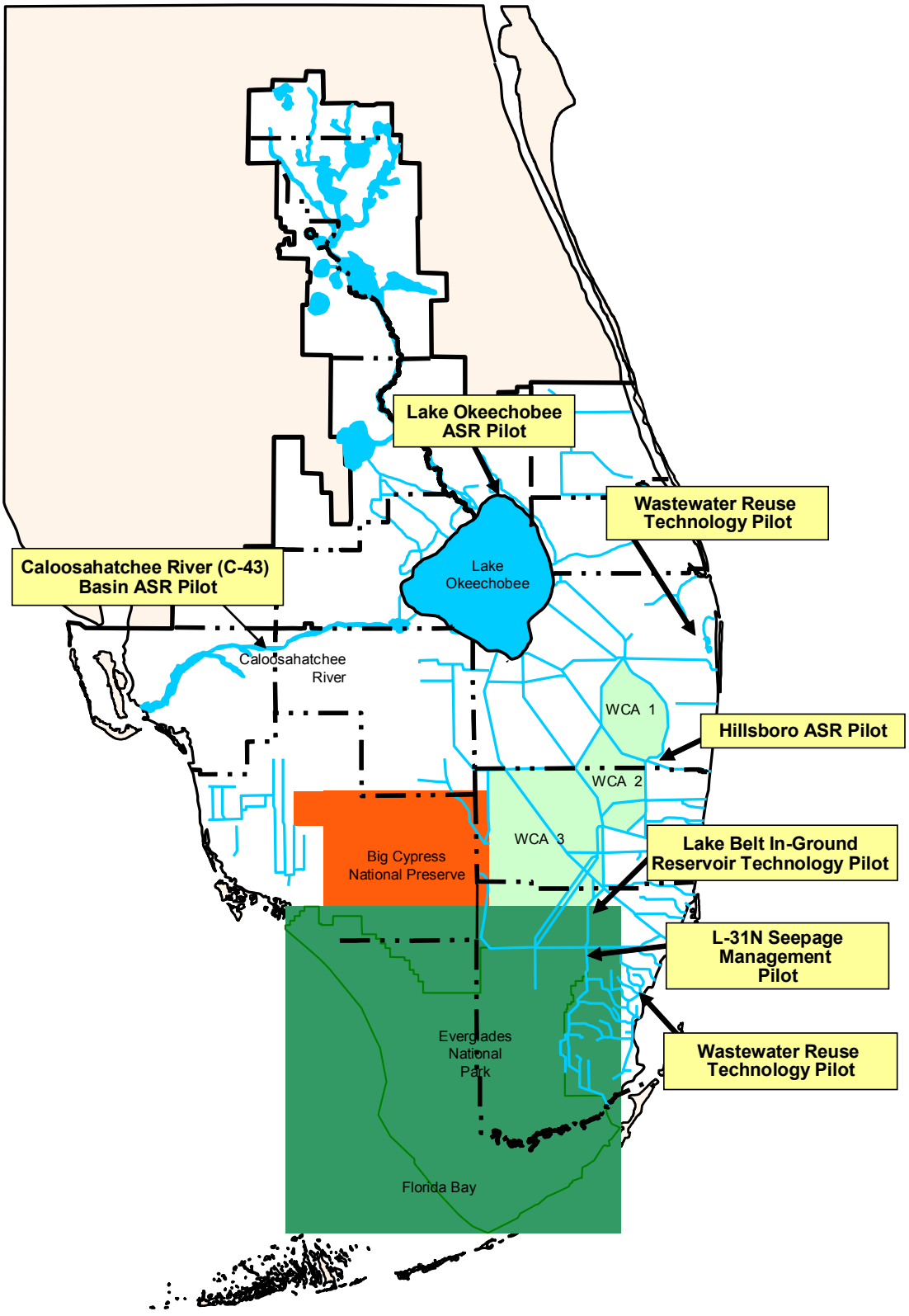

Figure 7a-3. General location of the CERP pilot projects

Caloosahatchee River (C-43) Basin ASR Pilot Project. The *Caloosahatchee River ASR Pilot Project Management Plan* (USACE and SFWMD, 2000h) was completed in November 2001. This project will assess the hydrogeological characteristics of the Hawthorne and Floridan aquifers and the water quality in the vicinity of the C-43 basin. Suitable sites and optimal configurations of ASR wells will be determined during this project. Also, the quality of the source water to be stored and recovered will be assessed. The DDR was initiated in February 2002 and is expected to be completed in December 2004.

Hillsboro ASR Pilot Project. The Hillsboro ASR Pilot Project will address uncertainties associated with ASR technology that are proposed in CERP. It will determine the feasibility of using ASR technology, evaluate the technical and regulatory uncertainties of the technology, and determine the optimum design of a facility prior to embarking upon full-scale implementation of the ASR facilities at the Hillsboro and other sites in the lower east coast region. The PMP for this project was approved in March 2001 (USACE and SFWMD, 2001i). The DDR was initiated in June 2002 and is on the critical path to meet the next milestone, which is the ASR system design, targeted for completion in early 2003.

Aquifer Storage and Recovery Regional Study. The ASR Regional Study is being designed to address regional technical issues associated with the CERP ASR Program beyond the scope of the individual ASR pilot projects. The project scope and a draft PMP have been developed for the study. Cost estimates and a work breakdown structure are being developed and the management plan should be completed in October 2002. The ASR Regional Study is expected to be completed approximately one year after the completion of the final ASR pilot project. Information gathered during the regional investigation will be used along with the results of the ASR pilot projects to make recommendations for the expanded use of ASR technology envisioned in CERP.

Lake Belt In-Ground Reservoir Technology Pilot Project. The Lake Belt In-Ground Reservoir Technology Pilot Project will determine whether two full-scale Lake Belt Storage Area components can be successfully constructed and operated to provide environmental and water supply deliveries. The pilot project will consist of land acquisition, a geologic investigation, a pilot reservoir siting, construction of impermeable barriers and a pilot-scale in-ground reservoir, and a water quality monitoring program. The PMP was completed in March 2002 (USACE and SFWMD, 2002b). The DDR was initiated in April 2002 and is expected to be completed in January 2006.

L-31N Seepage Management Pilot Project. The goal of the L-31N Seepage Management Pilot Project is to improve water deliveries to Northeast Shark River Slough and to restore wetland hydropatterns in Everglades National Park by reducing levee and ground water seepage and increasing sheet flow. This pilot project will evaluate various alternatives to reduce the seepage loss and a water budget and source determination will be developed to quantify baseline conditions. The PMP received final approval in April 2002 (USACE and SFWMD, 2002c). The DDR was initiated in April 2002 and is expected to be completed in December 2005.

Wastewater Reuse Technology Pilot Project. The Wastewater Reuse Technology Pilot Project will determine the ecological effects of using superior, advanced treated, reclaimed water to replace and augment freshwater flows to Biscayne Bay and the Bird Drive basin, and to determine the level of superior, advanced treatment required to prevent degradation of freshwater and estuarine wetlands and the Biscayne Bay. This pilot project will be implemented as two separate projects. The first project will concentrate on West Palm Beach/western Miami-Dade County ecological and technology assessments. The second will involve design, construction,

operation and monitoring of a pilot reuse plant in southern Miami-Dade County. The PMP for Part 1 was approved in January 2002 (USACE and SFWMD, 2002d). The DDR for Part 1 was initiated in January 2002. The PMP for Part 2 is scheduled for completion in February 2003.

Feasibility Studies

Six feasibility studies have been authorized: Water Preserve Areas (WPAs), Indian River Lagoon South, Southwest Florida, Florida Bay and Florida Keys, Biscayne Bay, and Comprehensive Integrated Water Quality. The WPAs, Indian River Lagoon South, and Biscayne Bay Feasibility Studies were authorized before CERP. Therefore, PMPs were not required and they are not included in the financial reporting in the CERP Annual 407 Report. The expected completion dates of the PMPs and final feasibility report are listed in Table 7a-8. The locations of five of the feasibility studies are presented in Figure 7a-4. The boundary of the Comprehensive Integrated Water Quality Feasibility Study is presented in Figure 7a-5.

Table 7a-8. Final approval of PMPs and final studies for feasibility studies

Feasibility Study	PMP Completion	Expected PMP Completion	Expected Study Completion
Water Preserve Areas Feasibility Study	Authorized Prior to CERP		
Indian River Lagoon South Feasibility Study			August 2002
Southwest Florida Feasibility Study	January 2002		July 2006
Florida Bay and Florida Keys Feasibility Study	February 2002		December 2006
Biscayne Bay Feasibility Study	Authorized Prior to CERP		
Comprehensive Integrated Water Quality Feasibility Study		Early Fall 2002	December 2006

Water Preserve Areas Feasibility Study. The WPAs are intended to provide regional storage to assist in meeting the future water supply needs of all types of users - agricultural, urban, and environmental. The draft feasibility report was completed in October 2001. In June 2002, a revised strategy was formulated to close out the feasibility study and move forward with individual PIRs for each of the WPA projects. Individual PMPs and PIRs will be initiated on an expedited basis between August 2002 and April 2003.

Indian River Lagoon South Feasibility Study. The primary purpose of the Indian River Lagoon South Feasibility Study is to improve surface water management in the C-23, C-24, C-25, and C-44 basins for habitat improvement in the St. Lucie Estuary and the Indian River Lagoon. Probable recommended facilities will include reservoirs for surface water storage and STAs for water quality improvement. The final feasibility report is expected to be submitted to Congress in August 2002 and approved for inclusion in the WRDA 2002.

Southwest Florida Feasibility Study. This feasibility study will identify water resource related problems and opportunities, and provide a framework to address the health of aquatic ecosystems, water flows, water quality, water supply, flood protection, wildlife, biological diversity, and natural habitat in Southwest Florida. The PMP was completed and approved in January 2002 (USACE and SFWMD, 2002e). Alternative plans are currently being evaluated. The feasibility study was initiated in August 2001 and the final feasibility report is scheduled for completion in July 2006.

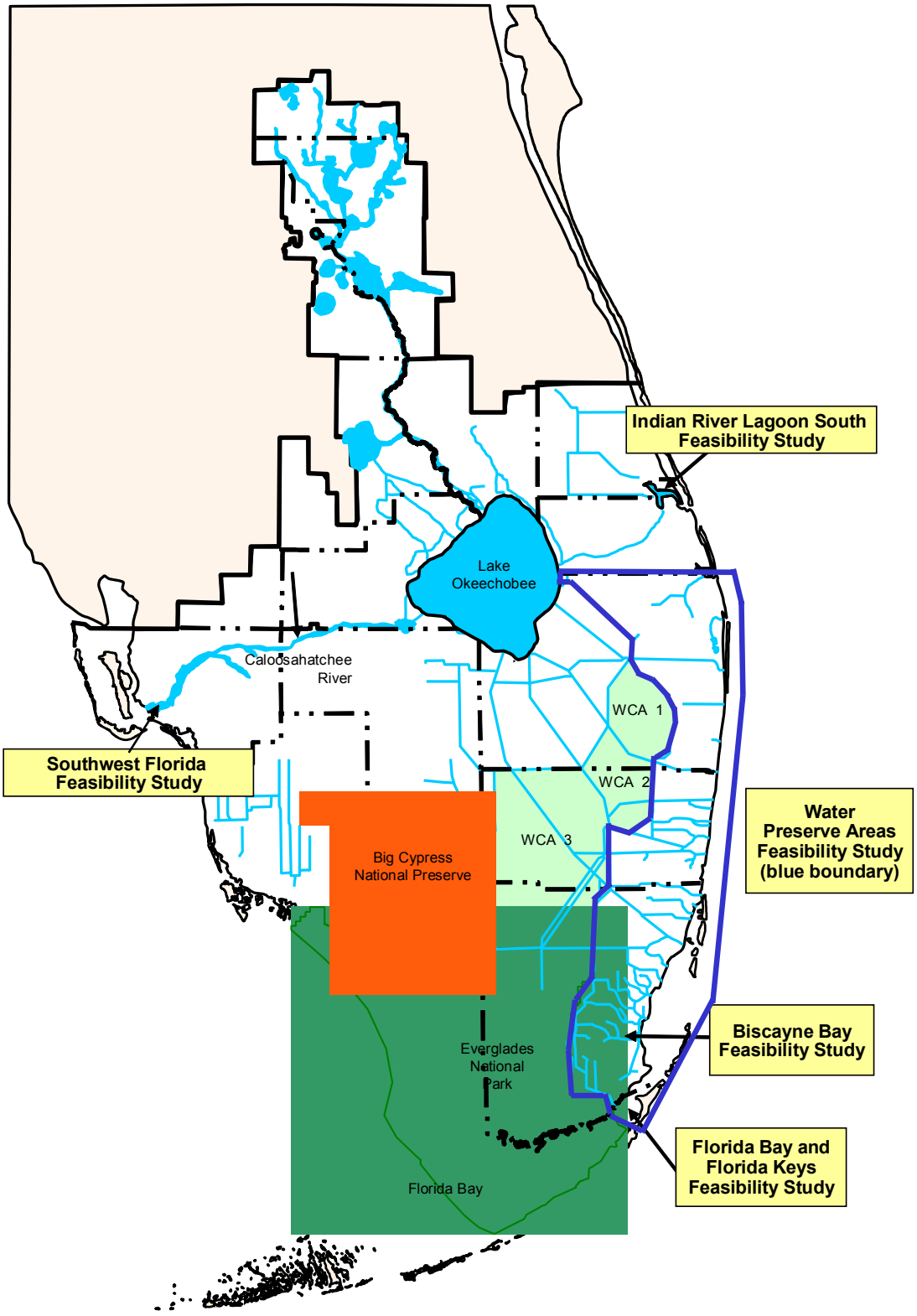

Figure 7a-4. General location of five of the CERP feasibility studies

Florida Bay and Florida Keys Feasibility Study. The Florida Bay and Florida Keys Feasibility Study will determine the types of modifications that are needed to successfully restore and protect the water quality and ecological conditions of Florida Bay and the Florida Keys' reef tract. The study will evaluate the quantity, timing, distribution and quality of fresh water that should flow to Florida Bay and provide recommendations for any modification of water deliveries that are expected as a result of the implementation of Everglades restoration programs. The PMP was finalized in February 2002 (USACE and SFWMD, 2002f). The feasibility study was initiated in March 2002. Performance measures and evaluation models are currently being developed. The final feasibility report is scheduled for completion in December 2006.

Biscayne Bay Feasibility Study The Biscayne Bay Feasibility Study was initiated in 1984 as a result of the findings from a reconnaissance report completed by the USACE. This reconnaissance report reviewed existing federal projects to determine if modifications were advisable to alleviate problems associated with water quality, biological productivity and related factors. The *Biscayne Bay, Florida Updated Reconnaissance Report* (USACE, 1995), completed in July 1995, recommended developing and operating a hydrodynamic simulation model, in addition to other ecosystem models of Biscayne Bay. Hydrodynamic, ground and surface water, water quality, and biological (including plant and animal communities) models are being developed.

Comprehensive Integrated Water Quality Feasibility Study. The Comprehensive Integrated Water Quality Feasibility Study will develop a recommended comprehensive plan to achieve and sustain improved water quality for ecosystem restoration in South Florida. The study area for project is the SFWMD boundary plus the study area for the Indian River Lagoon North Feasibility Study, which is within the St. Johns River Water Management District. (Figure 7a-5). The study will integrate CERP projects with other federal, state and local government programs. The study will identify degraded water bodies, identify and quantify types and sources of pollution, develop recommended pollution load reduction targets, conduct an inventory and evaluation of the suite of structural and nonstructural measures that improve water quality, recommend additional programs and projects and identify appropriate funding sources. The USACE and the FDEP are cosponsoring this study. The PMP is expected to be completed by the fall of 2002. Following the completion of the PMP, the USACE and the FDEP will negotiate a cost sharing agreement (50-50) to complete the feasibility study phase. The feasibility study phase is scheduled for completion in December 2006.

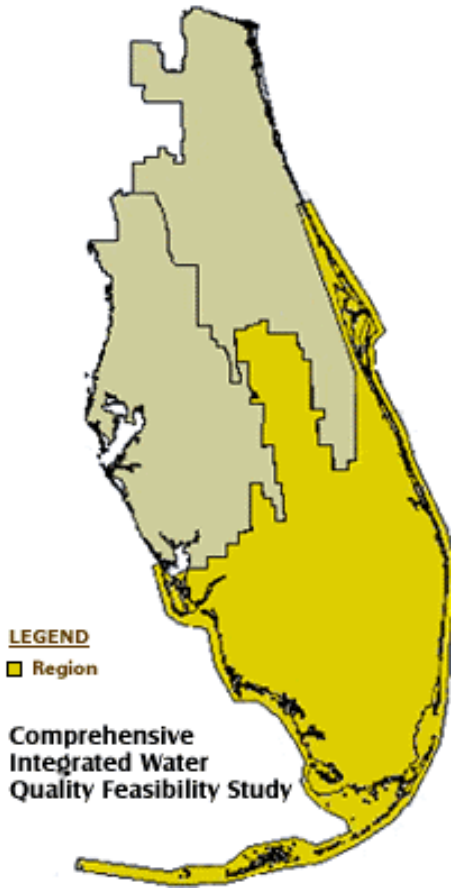

Figure 7a-5. Boundary of the Comprehensive Integrated Water Quality Feasibility Study (from www.evergladesplan.org)

Critical Projects

Seven projects determined to be critical to the restoration of the South Florida ecosystem were authorized prior to CERP (Figure 7a-6). They are now being implemented along with the CERP projects, but they are funded from different sources. Therefore, they are not included in the financial reporting of the CERP Annual 470 Report. Also, PMPs and PIRs are not required for critical projects.

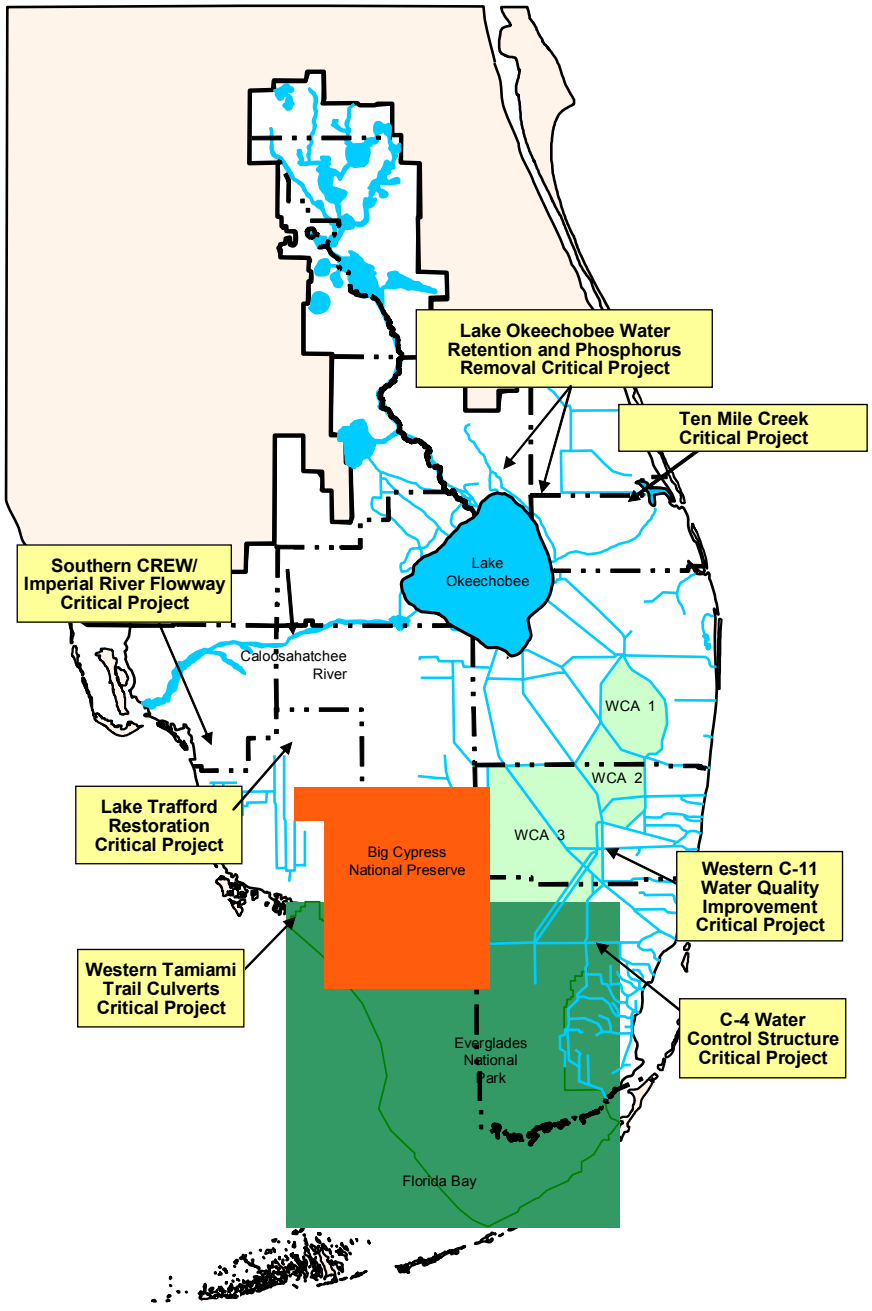

Figure 7a-6. General location of critical projects

Ten Mile Creek Critical Project. The Ten Mile Creek Critical Project will provide seasonal or temporary storage of stormwater from the Ten Mile Creek basin in St. Lucie County. Increased runoff from this basin has contributed to salinity fluctuations that are causing habitat elimination in Indian River Lagoon. An aboveground reservoir, a pump station, and a gated water-level control structure will be constructed. Plans and specifications were completed in May 2002. Construction is expected to be awarded in December 2003 and completed in April 2004.

Western Tamiami Trail Culverts Critical Project. The Tamiami Trail, constructed in 1928, intercepts north-south flowways to the Big Cypress National Preserves. The Western Tamiami Trail Culverts Critical Project will increase the number of north-south flowways by adding culverts that will restore natural hydropatterns and improve sheet flow of surface water within Ten Thousand Island National Wildlife Refuge, Big Cypress National Preserve, and Everglades National Park. Plans and specifications are expected to be completed in January 2003. Construction is expected to be awarded in July 2003 and completed in October 2005.

C-4 Water Control Structure Critical Project. A large volume of seepage is lost from WCA 3B to the coast because the existing water management system is unable to raise surface and ground water levels high enough to prevent seepage. Construction of the C-4 Water Control Structure will increase aquifer recharge and surface and subsurface storage of water. The project will also enhance habitat for plants and animals. The plans and specifications were completed in July 2000. Construction began in November 2000 and is expected to be completed in the first quarter of fiscal year 2003.

Southern CREW/Imperial River Flowway Critical Project. The Southern Corkscrew Regional Ecosystem Watershed (CREW)/Imperial River Flowway Critical Project will reestablish more natural flow patterns in the Southern CREW, restore the Imperial River's natural flowway to Estero Bay, and reduce nutrient loads to the Imperial and Estero Rivers. The project involves the acquisition of approximately 2,720 acres. The project is divided into three phases. Phase 1 was the construction of the Kehl Canal Weir Modification, which was completed in February 1998. Phase II is expected to be completed in February 2003 and consists of land acquisition and restoration of historic sheet flow to approximately 2,720 acres. Phase III consists of acquisition of approximately 2,040 acres and restoration of historic sheet flow.

Lake Trafford Restoration Critical Project. The Lake Trafford Restoration Critical Project will improve lake water quality and subsequent flows to the Corkscrew Swamp Sanctuary, the CREW, and the Florida Panther National Wildlife Refuge. Eight and a half million cubic yards of organic sediment will be dredged from the lake and disposed of on agricultural lands. Currently, the project is on hold pending further discussions.

Lake Okeechobee Water Retention/Phosphorus Removal Critical Project. The purposes of the Lake Okeechobee Water Retention/Phosphorus Removal Critical Project are to capture and attenuate peak flows for portions of the watershed, restore wetlands and improve water quality by the removal of phosphorus from waters entering Lake Okeechobee. Stormwater treatment areas (STAs) will be constructed for Taylor Creek and Nubbins Slough. Also, isolated wetlands will be restored on privately owned agricultural parcels north of Lake Okeechobee. The construction of one isolated wetland, the Byrd wetland, was completed in June 2002. The others are expected to be completed by June 2003. The design for the STAs was completed in July 2001.

Western C-11 Water Quality Improvement Critical Project. The purpose of the Western C-11 Water Quality Improvement Critical Project is to improve the quality and timing of stormwater discharges from the Western C-11 basin to the Everglades Protection Area by separating seepage from stormwater runoff and pumping the relatively clean seepage waters back

into WCA 3A. Currently, the S-9 pump station pumps urban and agricultural stormwater runoff from the Western C-11 basin directly into WCA 3A. Four new seepage return pumps adjacent to the S-9 pump station (Phase 1) were installed in November 2000 and the operations manual was completed in May 2002. Construction of a new divide structure in the C-11 Canal (Phase 2) began in November 2001. The divide structure construction and the operations manual should be completed by October 2003.

Other CERP Projects

Work has commenced on 12 other CERP projects (Table 7a-9 and Figure 7a-7). The PMPs have been completed for 7 of these projects and PIRs have been initiated. The development of PMPs continues for the five remaining projects.

Table 7a-9. Final approval of project management plans for other CERP projects in progress

Project Name	Completion Date of PMP	Expected Completion Date of PMP	Completion Date of PIR	Expected Completion Date of PIR	Expected Completion Date of Project
Acme Basin B Discharge		October 2002			2006
Biscayne Bay Coastal Wetlands		September 2002			
C-111 Spreader Canal	March 2002			April 2006	
C-43 Basin Storage Reservoir – Part 1	February 2002			December 2005	
Everglades Agricultural Area Storage Reservoirs – Phase 1	January 2002			December 2004	
Florida Keys Tidal Restoration	April 2002			September 2004	
Indian River Lagoon		December 2002			
Lake Istokpoga Regulation Schedule		December 2002			
Lake Okeechobee Watershed	July 2001				
Taylor Creek/Nubbin Slough				August 2005	May 2010
Rest of project				April 2006	June 2013
North Palm Beach County - Part 1		November 2002			
Southern Golden Gate Estates Hydrologic Restoration	March 2001			May 2004	June 2008
WCA 3 Decompartmentalization and Sheet Flow Enhancement - Part 1	March 2002				
Eastern Tamiami Trail				December 2004	
Canal and Levee Modifications				January 2006	

Acme Basin B Discharge. The Acme Basin B Discharge Project will provide water quality treatment and stormwater attenuation for runoff from Acme Basin B prior to discharge to the Loxahatchee National Wildlife Refuge. Excess water available may be used to meet water supply demands. Several alternative designs for this project are being analyzed as part of the Basin-Specific Feasibility Studies that are scheduled for completion in November 2002. Data pertaining to the Acme Basin B that were collected and evaluated for this effort will be available by August 2002. The PMP is scheduled for completion in October 2002. A PIR schedule that will enable the project to be completed in 2006 is being developed. Additionally, the DDR will be started prior to completion of the PIR to ensure the 2006 deadline is met.

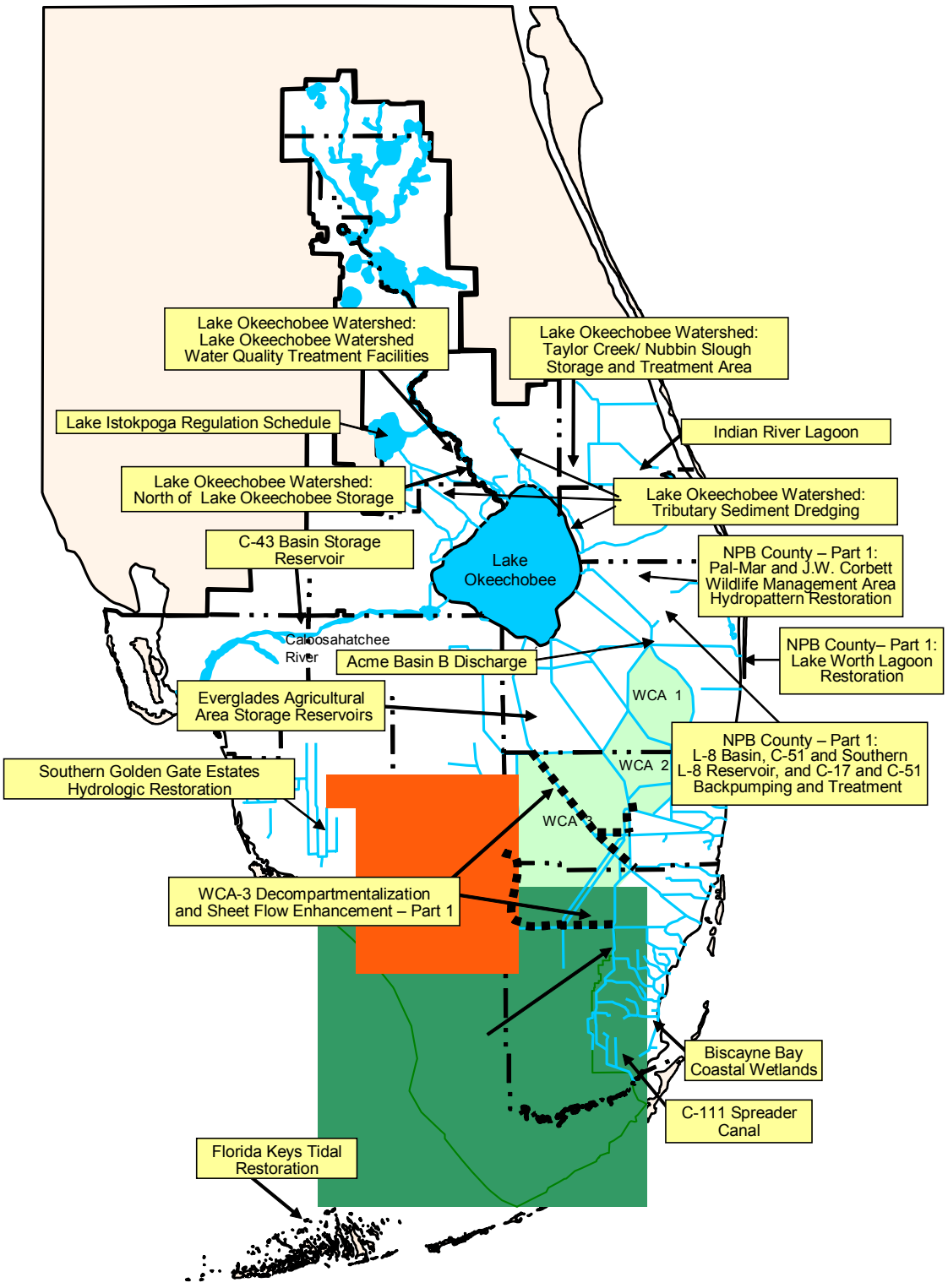

Figure 7a-7. General locations of other CERP projects currently being implemented

Biscayne Bay Coastal Wetlands. The ability of CERP to provide hydrologic benefits to the southern Everglades is supported in large part by the Biscayne Bay Coastal Wetlands project. The objective of the project is to develop the means to replace freshwater inputs to the Biscayne Bay Estuary that may potentially be reduced by other program components. The project has five separable elements: Deering Estate Flowway, Cutler Wetlands, L-31 East Flowway, North Canal Flowway, and Barnes Sound Wetlands. The project commenced in October 2001. The PMP is scheduled to be completed in September 2002.

C-111 Spreader Canal. The C-111 Spreader Canal project will alter the design of the C-111 Project by adding a number of enhancements, including constructing a STA, enlarging the pump station, extending the spreader canal approximately two miles, and installing culverts under U.S. Highway 1 and Card Sound Road. The PMP was completed in March 2002 (USACE and SFWMD, 2002g). The PIR was initiated in April 2002 and is expected to be completed by April 2006.

C-43 Basin Storage Reservoir – Part 1. The C-43 Basin Storage Reservoir – Part 1 project involves design and construction of aboveground reservoirs in the C-43 basin to capture basin runoff and water releases from Lake Okeechobee. Facilities will be designed to provide water supply benefits, some flood attenuation, and environmental water supply deliveries and water quality benefits to the Caloosahatchee Estuary. Water quality improvement requirements are currently being assessed and modeling efforts to determine the required reservoir capacity were completed in October 2001. The PMP was completed in February 2002 (USACE and SFWMD, 2002h). The PIR process was initiated in February 2002 and it is scheduled for completion in December 2005.

Everglades Agricultural Area Storage Reservoirs - Phase 1 - Phase 1 of the Everglades Agricultural Area (EAA) Storage Reservoir project has two components. The first is conveyance capacity increases for Miami, North New River, Boles, and Cross Canals. The second part is an aboveground reservoir capacity that will provide for irrigation requirements in the EAA, environmental deliveries of water to the WCAs, storage of regulatory releases from Lake Okeechobee, and increased flood protection within the EAA. The PMP for this project was completed in January 2002 (USACE and SFWMD, 2002i). The PIR process was initiated in February 2002 and it is scheduled for completion in December 2004.

Florida Keys Tidal Restoration. The Florida Keys Tidal Restoration project will enhance the ecological functions of the nearshore waters of the Florida Keys by restoring tidal connections that were eliminated by the construction of Flagler's Railroad in the early 1900s. Four sites have been identified in the middle keys along U.S. Highway 1 in Monroe County. Tidal restoration will improve water quality, enhance health and composition of benthic communities, restore circulation, improve larval distribution, and determine the viability of other tidal restoration projects in the Florida Keys. The PMP was completed in April 2002 (USACE and SFWMD, 2002j). The PIR process was initiated on April 25, 2002 and is expected to be complete in September 2004.

Indian River Lagoon. The Indian River Lagoon project will improve surface water management in the C-23, C-24, C-25 and C-44 basins for habitat improvement in the St. Lucie Estuary and the Indian River Lagoon. The facilities recommended for the project include reservoirs for surface water storage, STAs for water quality improvement, and natural storage and water treatment areas. This project is the detailed design associated with the Indian River Lagoon South Feasibility Study. A draft PMP was completed in March 2002. The final PMP is scheduled for completion in December 2002.

Lake Istokpoga Regulation Schedule. Water resource problems in the Lake Istokpoga Basin will be addressed by implementing a new Lake Istokpoga Regulation Schedule. A long-term comprehensive management plan will be developed focusing on creating a balance between the environmental needs and water supply and flood control in the basin. The PMP is scheduled for completion in December 2002.

Lake Okeechobee Watershed. The Lake Okeechobee Watershed project will reduce phosphorus discharges into Lake Okeechobee from the watershed to the north, attenuate peak flows within the watershed, and provide for more natural water levels. These goals will be accomplished through reservoirs, STAs, and the removal of 150 tons of phosphorus from ten miles of primary canals. The PMP was completed in July 2001 (USACE and SFWMD, 2001j). The monitoring system design is expected to be approved in September 2002 and construction of the system is expected to be completed by June 2003. The PIR process was initiated in January 2002. The watershed assessment document, the first step in the PIR process, is expected to be completed in July 2003. The PIR for the Taylor Creek/Nubbin Slough portion of this project is expected to be completed in August 2005 and work should be completed by May 2010. The PIR for the rest of the project is expected to be completed in April 2006. The entire project should be completed by June 2013.

North Palm Beach County - Part 1. Part 1 of the North Palm Beach County project includes six separable elements: 1) Pal Mar and J.W. Corbett Wildlife Management Area Hydropattern Restoration; 2) C-51 and Southern L-8 Reservoir; 3) Lake Worth Lagoon Restoration; 4) C-17 Pumping and Treatment; 5) L-8 Basin Modifications and 6) C-51 Pumping and Treatment. The PMP is in the final stages of completion. However, early authorization has been granted to proceed with the PIR phase of the project. An A/E Support Services contract for assistance with the PIR was approved by the SFWMD Governing Board in August 2002. Furthermore, approval was previously granted to move forward with work on the L-8 Reservoir Testing Project prior to approval of the PMP to gather data necessary for the PIR.

Southern Golden Gate Estates Hydrologic Restoration. The objective of the Southern Golden Gate Estates Hydrologic Restoration project is to reestablish historic flowways, sheet flow, and hydroperiods of wetlands; reduce point discharges to improve the health and productivity of downstream estuaries; improve aquifer recharge for water supply and prevention of saltwater intrusion; and maintain flood protection. The PMP was approved in March 2001 (USACE and SFWMD, 2001k). A conceptual restoration plan was developed during 2001. The primary components of the restoration plan are land acquisition, construction of pumping stations, canal plugs, roadwork, ecological and hydrological monitoring, and adaptive management. Furthermore, an ecological and hydrological monitoring program will be initiated to determine the effectiveness of the project, and adaptive management practices will ensure desirable ecological responses. The PIR is scheduled for completion in May 2004 and the project is scheduled for completion in June 2008.

WCA 3 Decompartmentalization and Sheet Flow Enhancement - Part 1. Part 1 of the WCA 3 Decompartmentalization and Sheet Flow Enhancement project will reestablish the ecological and hydrologic connection between WCA 3A, WCA 3B, and Everglades National Park. A more natural sheet flow and hydroperiod for both WCA 3 and Everglades National Park will be provided through the planning and implementation of this project. The PMP was completed and approved in March 2002 (USACE and SFWMD, 2002k). The PIR process was initiated in April 2002. The PIR for the Eastern Tamiami Trail portion of the project is expected to be completed in December 2004. The PIR for the canal and levee modifications is expected to be completed in January 2006.

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